REMARKS

Claims 1-34 are presently pending, of which Claims 1-14, 22, and 30 have been withdrawn from consideration. Claims 15, 17, 20, 23, 25, 27, 31, and 32 have been amended. Support is found on Page 9, lines 19-24.

Rejection of Claims 15-21 and 23-29 under 35 U.S.C. § 103(a)

The Examiner rejected Claims 15-21 and 23-29 as being obvious over Japanese Patent Publication 8-137375, published on May 31, 1996 (hereinafter "'375 Patent") in view of U.S. Patent 4,576,850, issued to Martens on March 18, 1986 (hereinafter "Martens").

The '375 Patent describes a dry process wherein utilizing photofixing and thermal deformation of relief patterns wherein a photosensitive resin composition layer is provided on a base. A mold is brought into contact with a thermoplastic resin composition, and heat and pressure are used to form relief patterns. The mold is removed and the patterns in the thermoplastic resin composition are then subject to irradiation with light via an arbitrary mask, by which regions partially varying in the degree of curing are formed. The relief image forming material formed with the cured regions partially varied in the degree of curing is softened and deformed by heating at a specific temperature. The deformed patterns are thereafter fixed by applying full-surface exposure thereon.

Martens discloses an article that includes a shaped, plastic layer or body having crosslinked polymer with hard and soft segments or moieties and having a microstructure-bearing surface. The surface is prepared by a process that includes filling a mold master, bearing or encoded with the microstructure to be replicated, with a fluid, castable, one-part, preferably solvent-free, radiation addition-polymerizable, crosslinkable, synthetic, organic oligomeric composition (or precursors thereof) having "hard" segments and "soft" segments, exposing the resulting cast composition to radiation, preferably actinic radiation such as ultraviolet radiation, and thereby forming said article, e.g., a retroreflective cube-corner sheeting, Fresnel lens or video disc.

Applicant claims a method for continuously forming a pattern in a radiation curable material that provides between a radiation source and the liquid radiation curable monomer

material in a mold, a blocking pattern that can block a portion of the radiation from the radiation source and a base film in contact with said radiation curable monomer material. The monomer material is cured in a mold with radiation from the radiation source through the blocking pattern and the base film to form a pattern in the radiation curable material as the radiation curable monomer material passes the radiation source. The pattern includes a first cured portion cured to a first amount and a second cured portion cured to a second amount. The first amount is sufficiently different than the second amount to result in a visible discontinuity on the surface of the structure.

There is no disclosure or suggestion in Martens and the '375 Patent as a whole of forming differentially-cured structures in a continuous fashion with a blocking pattern that can block a portion of the radiation from the radiation source. Additionally, the '375 Patent does not remedy the deficiencies of Martens. There does not appear to be any disclosure or suggestion in either Martens or the '375 Patent of continuously curing in a radiation curable monomer material in a mold to form a pattern that includes a first cured portion cured to a first amount and a second cured portion cured to a second amount with the first amount being sufficiently different than the second amount to result in a visible discontinuity on the surface of the structure.

The '375 Patent discloses a dry process by utilizing a photofixing and thermal deformation of relief patterns with a solid thermoplastic resin that is first molded, then it is separated from the mold, and then the resin is separately exposed to radiation. The deformed relief patterns are thereafter fixed by applying full-surface exposure thereon. There is no disclosure or suggestion in the known prior art that the dry thermoplastic process outside a mold can be substituted into a process having a radiation curable monomer material, which can flow, in a mold to result in a pattern including a first cured portion cured to a first amount and a second cured portion cured to a second amount with the first amount being sufficiently different than the second amount to result in a visible discontinuity on the surface of the structure. Further, there is no disclosure or suggestion for aligning a blocking pattern between a radiation source and the radiation curable material for use in a continuous process.

Independent Claim 23 recites that the radiation curable monomer material is connected to a base disposed between the radiation curable monomer material and the pattern. There is no

teaching or suggestion alone or in combination of using a pattern to form a discernible pattern in a radiation curable monomer material, wherein the discernible pattern includes a first cured portion cured to a first amount and a second cured portion cured to a second amount. Again, there is no teaching or suggestion of combining the teachings of the '375 Patent and Martens in such a way so as to render the claims of the present application obvious.

Therefore, the claims are not obvious in view of the '375 Patent and Martens, either alone or in combination thereof.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner believes that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,

HAMILTON, BROOK, SMITH &
REYNOLDS, P.C.

Robert T. Conway
Registration No. 33,859
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

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Concord, Massachusetts 01742-9133